



# RETURN ON INVESTMENT: GREENER BUILDINGS

## REDUCING OUR IMPACT

The International Energy Agency (IEA) estimates that the construction and building sector accounted for 39% of all CO<sub>2</sub> emissions worldwide in 2018, [1]. Building standards like LEED were created to address this problem and reduce the environmental impact of constructing and operating our buildings by evolving

our construction techniques and the designs for our buildings. Through sustainable design, construction and operations, green buildings are reducing carbon emissions, energy use and waste; conserving water; prioritizing safer materials; and lowering our exposure to toxins.

## MAKING THE CASE FOR GREEN BUILDINGS

Ultimately though it is our client's money being spent, and it's necessary for us to articulate the return on investment (ROI) when our clients are considering the pursuit of building standards like LEED. How does each dollar invested in sustainable practices translate to a

measurably reduced environmental impact or a cost savings from the boost in a building's performance? USGBC, the creator of the LEED rating system, recently issued a press release answering this very question.

### COST SAVINGS

Nearly 20% lower maintenance costs for new green buildings when compared to typical commercial buildings. Nearly 10% lower maintenance costs for green building retrofits. [2]

Generally improved indoor air quality (thanks to lower indoor pollutant concentrations and high ventilation rates) reduces absenteeism, decreases stress, and can nearly double productivity for building occupants. [2]

Building owners report that green buildings - whether new or renovated - command a 7% increase in asset value over traditional buildings. [3]

### REDUCED IMPACT

Per a Department of Energy (DOE) review, 22 LEED-certified buildings dropped CO<sub>2</sub> emissions by 34%. [2]

LEED projects have diverted 80 million tons of waste from landfills, and are projected to have diverted 540 million tons by 2030

Green buildings achieving LEED certification in the US have been shown to consume 25% less energy and 11% less water, than non-green buildings. [3]

One specific cost analysis study led by Capital E, and prepared in partnership with USGBC and California's Sustainable Building Task Force, found that when considering all potential savings revolving around utility expenses and employee absenteeism, **green**

**buildings can provide over 10x the financial return on the premium that was required to construct it.** [4] The exact return on investment for every client will vary, but the arguments in favor of pursuing green building practices continue to grow.

## REFERENCES:

[1] <https://www.iea.org/reports/global-status-report-for-buildings-and-construction-2019>

[2] <https://www.usgbc.org/press/benefits-of-green-building>

[3] <https://www.worldgbc.org/benefits-green-buildings>

[4] <http://www.greenspacebuildings.com/wp-content/uploads/2011/05/Kats-Green-Buildings-Cost.pdf>

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